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Study of inelastic e-Cd and e-Zn collisions MARIUSZ PIWINSKI, LUKASZ KLOSOWSKI, DAREK DZICZEK, STANISLAW CHWIROT, Institute of Physics, Faculty of Physics, Astronomy and Informatics, Nicolaus Copernicus University in Torun, Grudziadzka 5, 87-100 Torun, Poland — Electron-photon coincidence experiments are well known for providing more detailed information about electron-atom collision than any other technique [1-3]. The Electron Impact Coherence Parameters (EICP) values obtained in such studies deliver the most complete characterization of the inelastic collision and allow for a verification of proposed theoretical models [4]. We present the results of Stokes and EICP parameters characterising electronic excitation of the lowest singlet P-state of cadmium and zinc atoms for various collision energies [5-7]. The experiments were performed using electron-photon coincidence technique in the coherence analysis version. The obtained data are presented and compared with existing CCC [8] and RDWA [9] theoretical predictions. [1] D. Dyl et al 1999 J. Phys. B: At. Mol. Opt. Phys. 32, 837844 [2] M. Piwinski et al 2006 J. Phys. B: At. Mol. Opt. Phys. 39, 19451953 [3] L. Klosowski et al 2009 Phys. Rev. A 80, 062709 [4] N. Andersen et al 1988, Phys. Rep. 165, 1188 [5] M. Piwinski et al 2002 J. Phys. B: At. Mol. Opt. Phys. 35, 38213827 [6] M. Piwinski et al 2012 Phys. Rev. A 86, 052706 [7] M. Piwinski et al 2015 Phys. Rev. A 91, 062704 [8] M. Berrington et al 2012 Phys. Rev. A 85, 042708 [9] T. Das et al 2014 Phys. Lett. A 378, 641

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